In the Claims

Please cancel claims 1-20 without prejudice or disclaimer of the subject matter contained therein.

Please insert new claims 21-46 as follows:

21. (New) A structural foil comprising:

at least two layers of metal sheets, the at least two layers of metal sheets including a metal foil having a thickness of 0.006 in. (0.15 mm); and

valley areas disposed on the structural foil wherein the valley areas are formed by compressing a portion of the at least two layers of metal sheets such that the valley areas form between the compressed portion of the at least two layers and an uncompressed portion of the at least two layers.

22. (New) A structural foil as recited in claim 21, the structural foil further comprising:

a corrugation including the at least two layers of metal sheets disposed on the structural foil, where the compressed portion includes the corrugation such that the at least two layers of metal sheets of the corrugation are interlocked and nested.

23. (New) A structural foil as recited in claim 21, wherein flexibility of the valley areas provides flexibility to the structural foil.

24. (New) A structural foil as recited in claim 21, wherein the compression of the portion of the at least two layers of metal sheets is at an edge of the at least two layers of metal sheets to interlock the at least two layers of metal sheets and prevent separation of the at least two layers of metal sheets.

25. (New) A structural foil as recited in claim 21, the structural foil further comprising:

spacers disposed between the at least two layers of metal sheets whereby spacing provided by the spacers provides insulative properties for the structural foil.

26. (New) A structural foil as recited in claim 25, wherein the insulative properties include heat shielding such that the structural foil provides heat shielding.

27. (New) A structural foil as recited in claim 25, wherein the insulative properties include sound insulation such that the structural foil provides acoustic shielding.

28. (New) A structural foil as recited in claim 21, wherein the metal foil of the at least two layers of metal sheets has a thickness of 0.005 in. (0.125 mm) or less.

29. (New) A structural foil as recited in claim 21, wherein the metal foil of the at least two layers of metal sheets has a thickness of 0.002 in. (0.05 mm) or less.

30. (New) A method for forming a structural panel, the method comprising:

forming a layer of metal sheets, the layer of metal sheets including a metal foil having a thickness of 0.006 in. (0.15 mm); and

compressing a portion of the structural panel to form valley areas, where the valley areas are disposed adjacent the compressed portion of the structural panel and uncompressed portions of the structural panel.

31. (New) A method for forming a structural panel as recited in claim 30, wherein the metal foil of the at least two layers of metal sheets has a thickness of 0.005 in. (0.125 mm) or less.

32. (New) A method for forming a structural panel as recited in claim 30, wherein the metal foil of the at least two layers of metal sheets has a thickness of 0.002 in. (0.05 mm) or less.

33. (New) A method for forming a structural panel as recited in claim 30, wherein the structural panel includes spacers disposed on the structural panel, where spacing provided by the spacers provides insulative properties to the structural panel.

34. (New) A method for forming a structural panel as recited in claim 33, wherein the insulative properties includes acoustical shielding.

35. (New) A method for forming a structural panel as recited in claim 33, wherein the insulative properties includes heat shielding.

36. (New) A method for forming a structural panel as recited in claim 30, wherein the configuration of the valley areas adjacent the compressed portion of the structural panel and uncompressed portions of the structural panel provides flexibility to the structural panel.

37. (New) A method for forming a structural panel as recited in claim 30, wherein the compression of the portion of the at least two layers of metal sheets is at an edge of the at least two layers of metal sheets to interlock the at least two layers of metal sheets and prevent separation of the at least two layers of metal sheets.

38. (New) A structural acoustical shield, the shield comprising at least two layers of metal sheets having spacers, the at least two layers including a metal foil having a thickness of 0.006 in. (0.15 mm) where a portion of the at least two layers of metal sheets is interlocked to form valley areas for the structural acoustical shield.

39. (New) A structural acoustical shield as recited in claim 38, wherein the at least two layers of metal sheets are interlocked by folding the at least two layers of metal sheets.

40. (New) A structural acoustical shield as recited in claim 38, wherein the at least two layers of metal sheets are interlocked by compressing a portion of the at least two layers of metal sheets.

41. (New) A structural acoustical shield as recited in claim 40, wherein the compression of the portion of the at least two layers of metal sheets is at an edge of the at least two layers of metal sheets to interlock the at least two layers of metal sheets and prevent separation of the at least two layers of metal sheets.

42. (New) A structural acoustical shield as recited in claim 38, wherein spacing provided by the spacers provides acoustical shielding characteristics for the structural acoustical shield.

43. (New) A structural acoustical shield as recited in claim 38, wherein spacing provided by the spacers provides heat shielding characteristics for the structural acoustical shield.

44. (New) A structural acoustical shield as recited in claim 38, wherein flexibility of the valley areas provides flexibility to the structural acoustical shield.

45. (New) A structural acoustical shield as recited in claim 38, wherein the metal foil of the at least two layers of metal sheets has a thickness of 0.005 in. (0.125 mm) or less.